Library of AMIP Data Transmission Standards (LATS)

LATS is a library of software routines to output gridded data developed by PCMDI in support of AMIP II and other intercomparison projects. The primary function of LATS is to establish and implement a convention/standard for gridded data and thus facilitate data handling and exchange. The LATS Application Programmer Interface (API) is designed to be simple to understand and use. FORTRAN and C APIs are provided.

LATS applications output data in either the WMO "GRIdded Binary" (GRIB) format or in the NetCDF format under the COARDS convention. LATS−generated data written according to the GRIB or COARDS conventions is readily accessible by CDAT, GrADS or EzGET. A variety of other software packages recognize the NetCDF COARDS convention.

However, rather rigid constraints are placed on the structure (e.g., dimension ordering) of data written and thus in its current form LATS is not be considered a general purpose gridded data output system. These constraints are a consequence of the following design criteria:

- Simple to use
- Multi−platform
- Targeted for GCM output (currently limited to rectilinear data)
- Implement and establish conventions for data and metadata
- Use of two well−established and freqently used formats
- Software to be publicly available and free of charge